

## Chemical Hair-on Tanning

There are plenty of sources for techniques for skinning, so I will skip the details. But some basic points are in order. Small animals can be either cased or flat. With the cased method, you end up with a tube. With the flat method, you end up with a flat hide. In either method, the hide should be pulled off, not cut. The cuts are to get started and to finish, but mostly you just pull the hide off of the carcass. Places like the top of the tail may need a little help from a knife, but pulling is the way to go. You can leave the face, tail, and feet, if you like, but there will probably be more cutting involved in these areas. The first time you skin an animal, it will take you an hour or two. It gets quicker with practice.

I use only road-kills and I collect only during November, December, and January. Tanning with the hair on is fairly time-consuming and you want the best looking pelt for your efforts, so stick with the time of year when the animals have the best fur with the least hair loss. An added benefit of the colder months is that the carcasses decompose a lot slower, so you will have a much pleasanter time of it. In my state, I need to have a valid hunting license to pick up road kills and I can only pick them up in season. You will need to check with your own state laws.

I consider a road-kill as a gift from the tribe of that animal and I always give thanks for hide and honor the life and spirit of the animal I am taking. Do what you feel is right.

The hide, as it comes off the carcass, is called a "green" hide. It will have pieces of meat and fat on it, but don't worry about those right now, unless there is a lot. If you need to store the hide, it can be frozen at this point. Just fold it so that there is nothing but hair showing, put it in freezer baggie, and toss it in the freezer. If you have a lot of hides, it is a good idea to date them.

To do tanning you will need a five-gallon plastic paint bucket, a strong, clean wooden stick about four feet long (no bark), a grapefruit knife, and the chemicals, which should be locally available. The washing soda and the salt, and the grapefruit knife can be had at most grocery stores. The alum is aluminum sulfate, which is sold at plant nurseries as a blueberry and azalea food.



Here is the recipe:

2/3 cup washing soda

1cup non-iodized salt

2  $\frac{1}{2}$  cups alum

This recipe is good for 4-6 rabbits or squirrels, 3-4 possums or groundhogs, 2 foxes or raccoons, or 1 coyote or beaver.

Fill a 5 gallon bucket with about 3 gallons of warm, but not hot water. Add the salt and mix with the stick until the salt is dissolved. Then add the aluminum sulfate and the washing soda. Stir again until the chemicals are dissolved. It will be a little effervescent. This is OK.

Some folks flesh the hides before they go in the tanning solution, but I find it much more pleasant to flesh after a couple of days in the solution. At this point the solution is ready to receive the green hides.

The hides should be thawed out when you add them to the solution. Stir them in with the mixing stick, making sure there are no air pockets trapped under the hides. I like to lift the hides out with the stick and then re-immerses them. You can put a non-metallic rock on the hides to hold them below the surface if they float out of the solution. Broken pieces of common flower pot work for this, but be careful of the sharp edges.

Each day, the hides should be stirred, lifted and immersed. Once again, make sure that there are no air pockets trapped in a hide. There should be no off odors from the solution.

The hides should stay in the solution a couple of days, three if it is cold. After this time you should flesh them. This process removes all the fat, meat and membrane from the flesh side of the hide. The easiest way to start is to hang the hide over the bucket for 15 minutes and let most of the solution drain out of the fur. If you have more than one hide in the solution, you can let the next one drain while you flesh the first.

To flesh a small hide, your leg is the best fleshing beam. Cover it with a plastic trash bag and drape the hide over it, flesh side up, head pointing away from your body. With the grapefruit knife, scrape the outermost layer of membrane off the hide, along with any fat and meat. It should come off mostly in one large piece. Start at the neck and work down to the tail, pushing and scraping all the membrane, fat and meat. The membrane is a shiny layer containing small blood vessels. If you reach a lot of hair, you have gone too far. Move on. You want to get all the membrane off, and no more. Some animals, especially raccoons, have deep hair follicles, so you may see some hair come through the back. Don't worry about this. You would lose those hairs anyway.

When you have worked to the tip of the tail, go back to the neck and work from the neck forwards, doing the same. The belly area will be very thin, so you need a light touch, especially with rabbits and foxes. The toughest areas are the head, shoulders and tail. These areas need a lot of scraping to come out soft, so don't be afraid to put on the pressure.

When you are finished, you will have a clean half-tanned hide. If the tanning solution is dirty and oily, throw it out and make a fresh batch. If it is relatively clean, you can continue to use it, perhaps pouring off the top inch of oily water. Put the fleshed hides into the tanning solution and stir as above. The total tanning time is 7-14 days, depending on the thickness of the hides and the ambient temperature. Hotter means less time. I usually tan during the winter or early spring, so 14 days is the norm for me. Don't forget to stir twice a day. Once in the morning and once in the evening is good.

After the hides are done, they need to be wrung out by hand. You cannot hurt most hides by hand wringing as hard as you want. For a very thin, fragile hide, fold it in a towel and wring the towel with the hide inside. After wringing, hang the hide over a non-metallic clothes line in the shade, but with air circulation. Fold the hide over the line, with the fur side out and the flesh side up against itself. The idea is to dry the fur, but not the flesh. Leave it over night, but not outside. Wandering dogs love these things and you don't want to lose it now.

When the fur is pretty dry, you can start breaking the hide. The goal is to keep the hide moving while it is drying. By "moving", I mean that the tiny fibers of the hide are moving against each other. This, more than anything else, makes for a soft finished pelt. To help with the process, you can rub the flesh side with an Ivory soap bar as you are drying. This lubricates the fibers. This can be followed with Mink Oil for a really soft feel.

Breaking the hide can be done in a number of ways. Stretching the hide by pulling on it works fine and is a great upper body workout. Stretch one way and then the other, working from top to bottom and side to side. Make sure you hit the edges well, as these areas dry first. Keep working the hide until it is dry. If it feels at all cool to the touch, on either side, it is still wet. Keep going. When you think it is dry, keep going for a few more minutes. The biggest mistake beginners make is quitting the breaking process too soon. Keep going. It feels good, doesn't it? Keep going. When it is really dry and not cool to the touch at all, you are done. Breaking takes anywhere from an hour to many hours, depending on size and thickness.

### **Mistakes I have made already, so you don't have to...**

- Using metal for drying line, stirring stick, or bucket. It makes really ugly green-blue spots.
- Leaving a hide to dry where a dog can get it. I got lots of exercise learning this lesson.
- Stopping breaking too early. You are better off freezing the hide if you have to stop.
- Air pockets trapped in the hide while soaking. Leads to a rotted, stinky hide.
- Not working the edges enough while breaking. They dry fast!

**Good Luck!**